

05/06  
06/06

Page 1 of 8

# 4



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/047,542

DATE: 06/06/2002

TIME: 10:42:30

Input Set : A:\03090504.app

Output Set: N:\CRF3\06062002\J047542.raw

P.6

3 <110> APPLICANT: LARRICK, JAMES W.  
4 WYCOFF, KEITH L.  
6 <120> TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING VIRAL  
7 AND BACTERIAL DISEASES  
9 <130> FILE REFERENCE: 030905.0004.CIP1  
11 <140> CURRENT APPLICATION NUMBER: US 10/047,542  
12 <141> CURRENT FILING DATE: 2001-10-26  
14 <150> PRIOR APPLICATION NUMBER: PCT/US01/13932  
15 <151> PRIOR FILING DATE: 2001-04-28  
17 <150> PRIOR APPLICATION NUMBER: 60/200,298  
18 <151> PRIOR FILING DATE: 2000-04-28  
20 <160> NUMBER OF SEQ ID NOS: 101  
22 <170> SOFTWARE: PatentIn Ver. 2.1  
24 <210> SEQ ID NO: 1  
25 <211> LENGTH: 1596  
26 <212> TYPE: DNA  
27 <213> ORGANISM: Homo sapiens  
29 <400> SEQUENCE: 1  
30 atggctccca gcagcccccgc gcccgcgtc cccgcactcc tggcctgct cggggctctg 60  
31 ttcccaggac ctggcaatgc ccagacatct gtgtccccct caaaagtcat cctgccccgg 120  
32 ggaggctccg tgctggtgac atgcagcacc tcctgtgacc agcccaagtt gttgggcata 180  
33 gagaccccggt tgccctaaaaa ggagttgctc ctgcctggaa acaaccggaa ggtgtatgaa 240  
34 ctgagcaatg tgcaagaaga tagccaaaccat atgtgttatt caaactgccc tggatggcag 300  
35 tcaacagcta aaaccttcct caccgtgtac tggactccag aacgggtgga actggcaccc 360  
36 ctccccctt ggcagccagt gggcaagaac cttaccctac gctgccaggt ggagggtggg 420  
37 gcaccccggtt ccaacccatc cgtgggtctg ctccgtgggg agaaggagct gaaacggggag 480  
38 coagctgtgg gggagcccgcc tggaggtcacg accacgggtgc tggtgaggag agatcaccat 540  
39 ggagccaatt tctcgtgccc cactgaactg gacctgccc cccaagggtt ggagctgttt 600  
40 gagaacaccc tggccccccta ccagctccag acctttgtcc tggccagcgc tccccccacaa 660  
41 ctgtcagcc cccgggtctt agaggtggac acgcaggggaa cctgtggtctg tccctggac 720  
42 ggctgttcc cagtctcgga gcccagggtc cacctggcac tgggggacca gaggttgaac 780  
43 cccacagtca cctatggcaa cgactccttc tcggccaagg cctcagtcag tgtgaccgca 840  
44 gaggacgagg gcacccagcg gctgacgtgt gcagtaatac tgggggacca gagccaggag 900  
45 acaactgcaga cagtgaccat ctacagcttt ccggcgccca acgtgattct gacgaagcc 960  
46 gaggtotcag aaggggaccga ggtgacagtg aagtgtgagg cccacccctag agccaagggt 1020  
47 acgctgaatg gggttccagc ccagccactg gggccggagg cccagctctt gctgaaggcc 1080  
48 accccagagg acaacggggcg cagcttctcc tgctctgcaaa ccgtggaggt ggccggccag 1140  
49 cttagatcaca agaaccagac ccggggagctt cgtgtctgtt atggcccccctg actggacgag 1200  
50 aggattgtc cgggaaactg gacgtggcca gaaaatccc agcagactcc aatgtgccag 1260  
51 gcttggggaa acccattgcc cgagctcaag tgtctaaagg atggcacttt cccactgccc 1320  
52 atcggggaaat cagtgactgt cactcgagat cttgaggggca cctacctctg tcgggcagg 1380  
53 agcactcaag gggaggtcac ccgcaagggtg accgtaaatg tgctctcccc ccggatgag 1440  
54 attgtcatca tcactgtggt agcagccgca gtcataatgg gcactgcagg cctcagcag 1500

ENTERED

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/047,542

DATE: 06/06/2002  
TIME: 10:42:30

Input Set : A:\03090504.app  
Output Set: N:\CRF3\06062002\J047542.raw

55 tacctctata accgcagcg gaagatcaag aaatacagac tacaacaggc ccaaaaagg 1560  
 56 acccccata aaccgaacac acaagccacg cctccc 1596  
 59 <210> SEQ ID NO: 2  
 60 <211> LENGTH: 532  
 61 <212> TYPE: PRT  
 62 <213> ORGANISM: Homo sapiens  
 64 <400> SEQUENCE: 2  
 65 Met Ala Pro Ser Ser Pro Arg Pro Ala Leu Pro Ala Leu Leu Val Leu  
 66 1 5 10 15  
 68 Leu Gly Ala Leu Phe Pro Gly Pro Gly Asn Ala Gln Thr Ser Val Ser  
 69 20 25 30  
 71 Pro Ser Lys Val Ile Leu Pro Arg Gly Gly Ser Val Leu Val Thr Cys  
 72 35 40 45  
 74 Ser Thr Ser Cys Asp Gln Pro Lys Leu Leu Gly Ile Glu Thr Pro Leu  
 75 50 55 60  
 77 Pro Lys Lys Glu Leu Leu Leu Pro Gly Asn Asn Arg Lys Val Tyr Glu  
 78 65 70 75 80  
 80 Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met Cys Tyr Ser Asn Cys  
 81 85 90 95  
 83 Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu Thr Val Tyr Trp Thr  
 84 100 105 110  
 86 Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser Trp Gln Pro Val Gly  
 87 115 120 125  
 89 Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly Gly Ala Pro Arg Ala  
 90 130 135 140  
 92 Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys Glu Leu Lys Arg Glu  
 93 145 150 155 160  
 95 Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr Thr Val Leu Val Arg  
 96 165 170 175  
 98 Arg Asp His His Gly Ala Asn Phe Ser Cys Arg Thr Glu Leu Asp Leu  
 99 180 185 190  
 101 Arg Pro Gln Gly Leu Glu Leu Phe Glu Asn Thr Ser Ala Pro Tyr Gln  
 102 195 200 205  
 104 Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro Gln Leu Val Ser Pro  
 105 210 215 220  
 107 Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val Val Cys Ser Leu Asp  
 108 225 230 235 240  
 110 Gly Leu Phe Pro Val Ser Glu Ala Gln Val His Leu Ala Leu Gly Asp  
 111 245 250 255  
 113 Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn Asp Ser Phe Ser Ala  
 114 260 265 270  
 116 Lys Ala Ser Val Ser Val Thr Ala Glu Asp Glu Gly Thr Gln Arg Leu  
 117 275 280 285  
 119 Thr Cys Ala Val Ile Leu Gly Asn Gln Ser Gln Glu Thr Leu Gln Thr  
 120 290 295 300  
 122 Val Thr Ile Tyr Ser Phe Pro Ala Pro Asn Val Ile Leu Thr Lys Pro  
 123 305 310 315 320  
 125 Glu Val Ser Glu Gly Thr Glu Val Thr Val Lys Cys Glu Ala His Pro  
 126 325 330 335

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/047,542

DATE: 06/06/2002  
TIME: 10:42:30

Input Set : A:\03090504.app  
Output Set: N:\CRF3\06062002\J047542.raw

128 Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala Gln Pro Leu Gly Pro  
129 340 345 350  
131 Arg Ala Gln Leu Leu Leu Lys Ala Thr Pro Glu Asp Asn Gly Arg Ser  
132 355 360 365  
134 Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly Gln Leu Ile His Lys  
135 370 375 380  
137 Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly Pro Arg Leu Asp Glu  
138 385 390 395 400  
140 Arg Asp Cys Pro Gly Asn Trp Thr Trp Pro Glu Asn Ser Gln Gln Thr  
141 405 410 415  
143 Pro Met Cys Gln Ala Trp Gly Asn Pro Leu Pro Glu Leu Lys Cys Leu  
144 420 425 430  
146 Lys Asp Gly Thr Phe Pro Leu Pro Ile Gly Glu Ser Val Thr Val Thr  
147 435 440 445  
149 Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala Arg Ser Thr Gln Gly  
150 450 455 460  
152 Glu Val Thr Arg Lys Val Thr Val Asn Val Leu Ser Pro Arg Tyr Glu  
153 465 470 475 480  
155 Ile Val Ile Ile Thr Val Val Ala Ala Ala Val Ile Met Gly Thr Ala  
156 485 490 495  
158 Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg Lys Ile Lys Lys Tyr  
159 500 505 510  
161 Arg Leu Gln Gln Ala Gln Lys Gly Thr Pro Met Lys Pro Asn Thr Gln  
162 515 520 525  
164 Ala Thr Pro Pro  
165 530  
168 <210> SEQ ID NO: 3  
169 <211> LENGTH: 3003  
170 <212> TYPE: DNA  
171 <213> ORGANISM: Homo sapiens  
173 <400> SEQUENCE: 3  
174 gctataagga tcacgcgc cagtcgacgc tgagtcctc tgctactca gtttgcacc 60  
175 tcagcctcgc tatggctccc agcagccccc ggccgcgc gcccgcactc ctggcctgc 120  
176 tcggggctct gttcccagga cttggcaatg cccagacatc tggctccccc tcaaaaagtca 180  
177 tcctgccccg gggaggctcc gtgctggta catcgcac ctcctgtgac cagcccaagt 240  
178 tgttgggcat agagaccccg ttgcctaaaa aggagttgct ctcgcctggg aacaacccga 300  
179 aggtgtatga actgagcaat gtgcaagaag atagccaacc aatgtgtat tcaaaactgcc 360  
180 ctgatgggca gtcaacagct aaaaccttcc tcaccgtgta ctggactcca gaacgggtgg 420  
181 aactggcacc cctccctct tggcagccag tggcaagaa ctttacccta cgctgccagg 480  
182 tggagggtgg ggcaccccg gccaacctca cctgtgtgct gtcctgtgg gagaaggagc 540  
183 tggaaacggga gccagctgtg ggggagcccg ctgaggtcac gaccacgggt ctggtgagga 600  
184 gagatcacca tggagccaat ttctcggtcc gcactgaact ggacctgccc ccccaaggcc 660  
185 tggagctgtt tgagaacacc tcggccccctt accagctcca gaccttgc tggccagcga 720  
186 ctccccccaca acttgcaccccccgttcc tagaggtgga cacgcaggaccgtgtct 780  
187 gttccctggc cgggcgttcc cagtcgttcgg aggcccagg ccacctggca ctgggggacc 840  
188 agaggttga ccccacagtc acctatggca acgactcctt ctcggccaaag gcctcagtca 900  
189 gtgtgaccgc agaggacgag ggcacccagc ggctgacgtg tgcagtaata ctgggaacc 960  
190 agagccagga gacactgcag acagtgcacca tctacagctt tccggcgccc aacgtgattc 1020  
191 tgacgaagcc agaggtctca gaagggaccc aggtgacagt gaagtgtgag gcccacccta 1080

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/047,542

DATE: 06/06/2002  
TIME: 10:42:30

Input Set : A:\03090504.app  
Output Set: N:\CRF3\06062002\J047542.raw

192 gagccaaggt gacgctgaat ggggttccag cccagccact gggcccgagg gcccagctcc 1140  
 193 tgctgaaggc caccggcag gacaacgggc gcagcttctc ctgctctgca accctggagg 1200  
 194 tggccggcca gcttatacac aagaaccaga cccgggagct tcgtgtcccg tatgcccc 1260  
 195 gactggacga gaggattgt ccggaaact ggacgtggcc agaaaattcc cagcagactc 1320  
 196 caatgtgcca ggcttgggg aacccttgc ccgagctcaa gtgtctaaag gatggcactt 1380  
 197 tcccactgcc catcgggaa tcagtgactg tcactcgaga tcgttggggc acctacctct 1440  
 198 gtcggccag ggcactcaa ggggaggtca cccgcaaggt gaccgtgaat gtgctctccc 1500  
 199 cccggtatga gattgtcatc atcactgtgg tagcagccgc agtcataatg ggcactgcag 1560  
 200 gcctcagcac gtacccat aaccggccagc ggaagatcaa gaaatacaga ctacaacagg 1620  
 201 cccaaaaagg gaccccccattt aaccggaaaca cacaagccac gcctccctga acctatcccg 1680  
 202 ggacaggggc tcttcctcg cttccatata ttggggcag ttggggcaca ctgaacagag 1740  
 203 tggaaagacat atgcacatgca gctacaccta ccggccctgg gacggccggag gacagggcat 1800  
 204 tgcctcactt cagatataac agcatttggg gccatggtac ctgcacactt aaaacactag 1860  
 205 ggcacgcattt tgatctgttag tcacatgact aagccaagag gaaggagcaa gactcaagac 1920  
 206 atgattgtatg gatgtttaaag tctagcctga tgagaggggaa agtgggggaa gagacatagc 1980  
 207 cccaccatga ggacatacaa ctggaaataa ctgaaacttgc ctgcctattt ggtatgtca 2040  
 208 ggcccccacag acttacagaa gaagtggccc tccatagaca tggatggcat caaaacacaa 2100  
 209 aggcccacac ttccctgacgg atgcacgtt gggcactgtt gtctactgac cccaaaccctt 2160  
 210 gatgatatgt atttattcat ttgttatttt accagctattt tattgagtgtt cttttatgtt 2220  
 211 ggctaaatga acataggctt ctggcctcac ggagctccca gtccatgtca cattcaaggt 2280  
 212 caccaggtaa agttgtacag ttgttacact gcaggagagt gcctggcaaa aagatcaaatt 2340  
 213 ggggctggga cttctcattt gccaacctgc ctttccctgg aaggagtgtt ttttctatcg 2400  
 214 gcacaaaagc actatatggc ctggtaatgg ttcacagggtt cagagattac ccagtggggc 2460  
 215 cttattcctc cttccccc 3aaactgaca ctttggtag ccacccccc acccacatac 2520  
 216 atttctgcca gtgttacaa tgacactcaag cggcatgtc tggacatgag tgcccaggaa 2580  
 217 atatgccccaa gctatgcctt gtccctttgtt cctgtttgca tttactggg agcttgcact 2640  
 218 attgcagctc cagtttcctg cagtgtacag ggtctgtcaaa gcagtggggaa agggggccaa 2700  
 219 ggtattggag gactccctcc cagctttgaa agcctcatcc gcgtgtgtgt gtgtgtgt 2760  
 220 atgtgttagac aagctctcgc tctgtcaccc aggctggagt gcagtgggc aatcatggtt 2820  
 221 cactgcagtc ttgacctttt gggctcaagt gatccctccca ctcagccctc ctgagtagct 2880  
 222 gggaccatag gctcacaaca ccacacctgg caaattttagt tttttttttt ttttcagag 2940  
 223 acgggggtctc gcaacatttgc ccagacttcc tttgtttag ttaataaage tttctcaact 3000  
 224 gcc 3003  
 227 <210> SEQ ID NO: 4  
 228 <211> LENGTH: 6  
 229 <212> TYPE: PRT  
 230 <213> ORGANISM: Homo sapiens  
 232 <400> SEQUENCE: 4  
 233 Ser Glu Lys Asp Glu Leu  
 234 1 5  
 237 <210> SEQ ID NO: 5  
 238 <211> LENGTH: 7  
 239 <212> TYPE: PRT  
 240 <213> ORGANISM: Homo sapiens  
 242 <400> SEQUENCE: 5  
 243 Arg Ser Glu Lys Asp Glu Leu  
 244 1 5  
 247 <210> SEQ ID NO: 6  
 248 <211> LENGTH: 52

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/047,542

DATE: 06/06/2002  
TIME: 10:42:30

Input Set : A:\03090504.app  
Output Set: N:\CRF3\06062002\J047542.raw

249 <212> TYPE: DNA  
250 <213> ORGANISM: Artificial Sequence  
252 <220> FEATURE:  
253 <223> OTHER INFORMATION: Description of Artificial Sequence: Cloning primer  
255 <400> SEQUENCE: 6  
256 tctgttccca ggaactagtt tggcacagac atctgtgtcc ccctcaaaag tc 52  
259 <210> SEQ ID NO: 7  
260 <211> LENGTH: 38  
261 <212> TYPE: DNA  
262 <213> ORGANISM: Artificial Sequence  
264 <220> FEATURE:  
265 <223> OTHER INFORMATION: Description of Artificial Sequence: Cloning primer  
267 <400> SEQUENCE: 7  
268 cataccgggg actagtcaca ttcacggtca cctcgcgg 38  
271 <210> SEQ ID NO: 8  
272 <211> LENGTH: 799  
273 <212> TYPE: PRT  
274 <213> ORGANISM: Homo sapiens  
276 <400> SEQUENCE: 8  
277 Gln Thr Ser Val Ser Pro Ser Lys Val Ile Leu Pro Arg Gly Gly Ser  
278 1 5 10 15  
280 Val Leu Val Thr Cys Ser Thr Ser Cys Asp Gln Pro Lys Leu Leu Gly  
281 20 25 30  
283 Ile Glu Thr Pro Leu Pro Lys Lys Glu Leu Leu Leu Pro Gly Asn Asn  
284 35 40 45  
286 Arg Lys Val Tyr Glu Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met  
287 50 55 60  
289 Cys Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu  
290 65 70 75 80  
292 Thr Val Tyr Trp Thr Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser  
293 85 90 95  
295 Trp Gln Pro Val Gly Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly  
296 100 105 110  
298 Gly Ala Pro Arg Ala Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys  
299 115 120 125  
301 Glu Leu Lys Arg Glu Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr  
302 130 135 140  
304 Thr Val Leu Val Arg Arg Asp His His Gly Ala Asn Phe Ser Cys Arg  
305 145 150 155 160  
307 Thr Glu Leu Asp Leu Arg Pro Gln Gly Leu Glu Leu Phe Glu Asn Thr  
308 165 170 175  
310 Ser Ala Pro Tyr Gln Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro  
311 180 185 190  
313 Gln Leu Val Ser Pro Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val  
314 195 200 205  
316 Val Cys Ser Leu Asp Gly Leu Phe Pro Val Ser Glu Ala Gln Val His  
317 210 215 220  
319 Leu Ala Leu Gly Asp Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn  
320 225 230 235 240

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/047,542

DATE: 06/06/2002  
TIME: 10:42:31

Input Set : A:\03090504.app  
Output Set: N:\CRF3\06062002\J047542.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 2150,2214,2215

Seq#:14; N Pos. 2315

Seq#:82; Xaa Pos. 12,77,78,79,80,145,146,147,155,156,157,158,159,160,161

Seq#:82; Xaa Pos. 162,163,268,269,279,282

Seq#:88; Xaa Pos. 12,77,78,79,80,81,132,145,146,147